

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1-20. (Cancelled).

21. (New) A method of operation for a motorized medical fluid injector system, the method comprising:

- entering a mode of the injector system that permits use of service-related functions by a service technician different from those involved in medical injection;

- receiving one or more syringe constants while in the service mode;

- calculating an additional syringe constant based on the inputted syringe constant(s); and

- storing a syringe definition in the injector system based on the received syringe constant(s) and the calculated syringe constant.

22. (New) The method of claim 21, wherein the one or more syringe constants comprises at least one of a syringe diameter, a syringe stroke length, and a syringe volume.

23. (New) The method of claim 21, wherein the one or more syringe constants are selected from the group consisting of a syringe diameter, a syringe stroke length, a syringe volume, and combinations thereof.

24. (New) The method of claim 21, further comprising:

- updating a software routine within the injector system which relies on the syringe definition.

25. (New) The method of claim 21, further comprising:  
    exiting the service mode; and  
    entering an operation mode for use in medical procedures whereby a medical procedure involving injection may be executed.
26. (New) The method of claim 25, wherein the operational routine relies on the syringe definition.
27. (New) A method of operation for a motorized medical fluid injector system, the method comprising:  
    entering a mode of the injector system that permits use of service-related functions by a service technician different from those involved in medical injection;  
    receiving at least three syringe constants while in the service mode; and  
    storing a syringe definition in the injector system based on the at least three syringe constants that are received.
28. (New) The method of claim 27, wherein the at least three syringe constants are a syringe diameter, a syringe stroke length, and a syringe volume.
29. (New) The method of claim 27, further comprising:  
    updating a software routine within the injector system which relies on the syringe definition.
30. (New) The method of claim 27, further comprising:  
    exiting the service mode; and  
    entering an operation mode for use in medical procedures whereby a medical procedure involving injection may be executed.
31. (New) The method of claim 30, wherein the operational routine relies on the syringe definition.

32. A method of operation for a motorized medical fluid injector system, the method comprising:
- providing a data collection routine that prompts a user to input syringe constants into the injector system;
  - receiving input from the user related to at least two syringe constants; and
  - updating a syringe definition based on the received input.
33. (New) The method of claim 32, further comprising:
- storing the syringe definition in a non-volatile memory of the injector system.
34. (New) The method of claim 33, further comprising:
- deleting another syringe definition from the non-volatile memory.
35. (New) The method of claim 32, wherein the at least two syringe constants comprises two or more of a syringe diameter, a syringe stroke length, and a syringe volume.
36. (New) The method of claim 32, further comprising
- calculating another syringe constant based on the input relating to the at least two syringe constants.
37. (New) The method of claim 32, further comprising:
- modifying one or more medical functions for injecting fluid using the injector system affected by the updating.
38. (New) The method of claim 32, further comprising:
- modifying one or more parameters used in calibration of the injection of fluid, that are stored by the injector system and affected by the updating.

39. (New) The method of claim 32, further comprising:  
    associating a label with syringe information based on the received input.
40. (New) The method of claim 32, wherein the updating comprises:  
    modifying an existing syringe definition; or  
    creating a new syringe definition.
41. (New) A contrast media injector system comprising:  
    a processor;  
    a non-volatile storage coupled with the processor;  
    an application stored within the non-volatile storage configured to execute on the processor, the application including:  
        an input routine configured to:  
            enable a user to input at least two syringe constants;  
            determine an omitted syringe constant; and  
            calculate the omitted syringe constant; and  
        an updating routine configured to modify an existing syringe definition or create a new syringe definition based on the received data.
42. (New) The injector system of claim 41, wherein the existing syringe definition or the new syringe definition is stored in the non-volatile storage.
43. (New) The injector system of claim 41, further comprising:  
    another application that is stored in the non-volatile storage and that comprises one or more control routines to operate the injector system, wherein the control routines may utilize the existing syringe definition or the new syringe definition to operate the injector system.